ABSTRACT OF THE INVENTION

The invention provides membrane molecule indicators, including polypeptides, encoding nucleic acid molecules and cells containing such polypeptides and nucleic acid molecules. The invention membrane molecule indicators are characterized in that fluorescence resonance energy transfer (FRET) between a donor fluorescent domain and an acceptor fluorescent domain indicates a property of the membrane molecule. Also provided are methods of using the invention membrane molecule indicators to determine a property of a membrane molecule, and to identify compounds that modulates a property of a membrane molecule.